

## LIST OF MOLLUSCA OF RANGOON.

BY

DR. H. MARSHALL.

## (A.) FRESH WATER MOLLUSCA.

- 1a. *Melanoides tuberculata*, Müller.—(F. B. I. No. 28. *Tiara (Striatella) tuberculata*). This is a common species in Rangoon. The majority of specimens obtainable are very small, and light coloured. Some medium sized specimens were obtained from the Cantonment Garden tanks and Municipal tank in Creek Street. These are very dark in colour.
- 2a. *Melanoides scabra*, Müller.—(F. B. I. No. 60. *Tiara (Plotia) scabra*). Specimens of this mollusc were only obtained from the Royal Lakes. They are dark in colour and much decollated.
- 3a. *Acrostoma variabile* (Benson).—(F. B. I. No. 39. *Tiara (Melanoides) variabilis*). This is not a very common species in Rangoon. The local variety bears as a rule strong longitudinal ribs and is very dark in colour, some specimens being covered with a thick black deposit. Very occasionally somewhat lighter and more delicate specimens are obtainable and these are marked with two brownish bands on the last whorl. Specimens which are almost smooth and of a light olive colour ornamented with brown bands on the last whorl are sometimes brought into the market with prawns. I have not been able to ascertain as to where these specimens come from.
- 4a. *Vivipara bengalensis* var : *digona* (Blanford).—(F. B. I. No. 179. *Vivipara digona*). This is a common species found in almost all tanks, ponds, and ditches. Very beautiful specimens are obtainable in the Kokin-Lakes.
- 5a. *Vivipara bengalensis* var : *doliaris* (Gould).—(F. B. I. No. 168. *Vivipara doliaris*). Specimens which I take to be this variety do not appear to be anything like as common as *digona*. Most of the specimens obtainable are small.<sup>1</sup>
- 6a. *Vivipara heliciformis* var : *viridis*, Reeve.—(F. B. I. No. 185. *Vivipara (Idiopoma) heliciformis* var : *viridis*). Specimens which I take to be this variety were only found on one occasion.
- 7a. *Vivipara dissimilis* (Müller).—(F. B. I. No. 174. *Vivipara dissimilis*). Specimens of a uniform green colour with spire not much produced were obtained. I take these to be some variety of *dissimilis*.
- 8a. *Pachylabra conica* (Gray).—(F. B. I. No. 197. *Pila conica*). This is a very common species in Rangoon. Two varieties are obtainable, one unicoloured which is usually of a large size, the other variously banded with brownish bands. The banded specimens do not appear to reach the size of unicoloured specimens. This species is eaten by many classes of Natives, and many persons are employed in the trade who gather the Molluscs and take them round to private houses for sale. This mollusc along with *Vivipara bengalensis*, *Indoplanorbis exustus*, and *Melanoides tuberculata* are largely collected by the Chinese duck farm owners for the feeding of ducks.
- 9a. *Limnæa acuminata*, (Lam.).—(F. B. I. No. 211. *Limnæa (Limnæa) acuminata*). All specimens obtainable in Rangoon appear to be dwarfed. Two varieties have been found ; one something like variety *amygdalum*, Troschel, and the other variety *nana*, Annandale (Rec. Ind. Mus., Vol. XVI, Part 1, No. 6). This species is only obtainable from about October till the end of the year, after which it disappears.

<sup>1</sup> *V. bengalensis* var : *digona* has now been merged in *doliaris* (Rec. Ind. Mus. Vol. XXII. Part 2II, No. 20, p. 272.)

- 10a. *Limnæa pinguis* (Dohrn).—(F. B. I. No. 222. *Limnæa* (*Gulnaria*) *pinguis*). Only a few specimens were obtained but have apparently been mislaid.
- 11a. *Indoplanorbis exustus*, Desh.—(F. B. I. No. 227. *Planorbis exustus*). This is the commonest fresh water mollusc obtainable in Rangoon. This species is known to carry *Schistosoma spindalis* also a cercaria morphologically identical with that of *Schistosoma japonicum*.
- 12a. *Gyraulus convexiusculus* (Hutton).—(F. B. I. No. 234. *Planorbis* (*Gyraulus*) *convexiusculus*). A couple of specimens were found in the Pazundaung quarter of the town. This species is fairly common in Kamayut just outside Rangoon. Probably *Gyraulus euphraticus*, Mousson, will also be found here.
- 13a. *Lamellidens marginalis* (Lam.).—(F. B. I. No. 310. *Lamellidens marginalis*). This is a fairly common species in Rangoon. The following varieties have been obtained: (1) *generosus* (Gould). Usually large specimens; (2) *corrianus* (Lea). Not common; (3) *scutum* (Sowerby). Fairly common. There are specimens of var: *zonata* (Desh.) in the Indian Museum collection from Rangoon, but in spite of much searching I have not been able to find any.
- 14a. *Cyrena bengalensis*, (Lam.).—(F. B. I. No. 328. *Cyrena bengalensis*). After much searching a few living specimens were found at Dawbong and in a drain in Upper Pazundaung Road.

## (B.) LAND MOLLUSCA.

- 1b. *Streptaxis burmanicus*, Blf.—(F. B. I. No. 6. *Streptaxis burmanicus*). A single dead specimen (small variety) was picked up in Kemmendine.
- 2b. ? *Macrochlamys* sp.—This species at first sight looks very much like *Indoplanorbis exustus*. Specimens of this were sent to J. Cosmo Melville and he was of opinion that this was probably a juvenile *Plectophyllis*. The specimen sent was apparently imperfect. I am certain that even young specimens are not tomentose.
- 3b. *Macrochlamys molecula*, Benson.—(F. B. I. No. 195. *Macrochlamys* ? *molecula*). After much searching specimens have not been found.
- 4b. *Austenia peguensis*, Theobald.—(F. B. I. No. 297. *Austenia peguensis*). This is a common species at Hlawga which is about twenty miles from Rangoon. Only a single specimen has been taken locally.
- 5b. This small species was obtained in the Kemmendine Cemetery. I have not been able to identify it.
- 6b. *Pupisoma lignicola*, Stol.—(F. B. I. No. 49. *Pupisoma lignicola*). This species has been recorded from Rangoon by Hungerford, but I have not been able to obtain it.
- 7b. *Eulota similaris*, Fer.—(F. B. I. No. 173. *Eulota similaris*). This species is plentiful in Rangoon. All the specimens obtained were unicoloured.
- 8b. *Eulota* sp.—This is a small, extremely fragile, transparent, highly polished shell. The animal is not able to withdraw itself within the shell. It looks very like a *Eulota*, but I have not been able to identify it.
- 9b. *Opeas gracile*, Hutton.—(F. B. I. No. 317. *Opeas gracile*). This is a fairly common shell in Rangoon, but no specimens of *Ennea bicolor* Hutton, were found associated with it.
- 10b. *Succinea semiserica*, Gould.—(F. B. I. No. 448. *Succinea semiserica*). This is a very common species in Rangoon.
- 11b. *Vaginulus birmanicus*, Theobald.—(F. B. I. No. 478. *Vaginulus birmanicus*). This slug is fairly common in Rangoon.
- 12b. *Cyclophorus auranticus*, Schumacher.—This species is very localised, but where found is usually plentiful. Rangoon specimens appear to be somewhat like var: *andersoni* (Fauna of Mergui, von. Martens, p. 159)

but more white round the umbilicus. Very young specimens are almost transparent, and mottled with reddish brown. Young specimens before the lip is formed are very deep reddish brown. Full grown adult specimens greyish brown. Very old specimens seem to lose their colour and become almost white, though the peristome never loses its colour.

## (C.) RIVER MOLLUSCA.

- 1c. *Cerithium lemniscatum*, Qusay and Gaimard.—This species is recorded from Rangoon by von Martens.
- 2c. ?? *Cerithidea sp.*—A large specimen something like a *Cerithium* was taken at Dawbong, Rangoon. I have also a specimen from Kyanktan, Burma. Having no books dealing with *Cerithium* and its allies I am not able to say what this is.
- 3c. *Turritella columnaris*, Kiener.—This species has been recorded from Rangoon by von Martens. I have not been able to obtain specimens.
- 4c. *Littorina rubropicta*, von Martens.—(Fauna of Mergui, p. 170). This is a very common species in Rangoon. Specimens obtained in Kyanktan, Burma, are much larger than Rangoon specimens.
- 5c. *Littorina subintermedia*, Nevill.—This specimen was kindly identified for me by Dr. Annandale of the Indian Museum. It is fairly common attached to stones on the banks of the river.
- 6c. *Assiminea francesciæ*?, Gray.—These specimens were very kindly identified for me by Dr. Annandale as probably *francesciæ*.
- 7c. *Assiminea sp.*—These specimens are red in colour and might possibly be *A. brevicula*, Pfeiffer, but unfortunately no books are available giving the description of this species.
- 8c. ? *Rissoina sp.*—These specimens were found on the river training walls. I am unable to say what they really are.
- 9c. *Larina burmanorum*, Blanford.—This species has been recorded from the Rangoon River (Burma, Its People, and Productions, Vol. I, p. 157). I have not been able to obtain any specimens.
- 10c. *Neritina crepidularia*, Lam.—(Fauna of Mergui, p. 171). Black (lower surface) coloured specimens (*Dostia cornucopiæ*) are usually found mixed with typical red (lower surface) specimens. The periostracum varies from olive green to almost black. Some specimens being very prettily marked with black lines resembling somewhat Arabic writing.
- 11c. *Neritina sp.*—These are small and very dark being whitish below. I at first took them for young of *N. crepidularia* but probably they are a separate species.
- 12c. *Nerita sp.*—Only one specimen was taken and I am unable to identify it.
- 13c. ? *Siphonaria sp.*—This limpet is very plentiful. I cannot say whether it is really a *Siphonaria* or not.
- 14c. *Auricula jûdæ*, L.—Specimens apparently representing this species have been taken near Monkey Point in decaying vegetable matter. They are not common.
- 15c. *Auricula sp.*—This is the common *Auricula* of Rangoon, and may, perhaps, be *A. gangetica*.
- 16c. *Pythia plicata*, For.—This species is mentioned by von Martens as from Rangoon. Many specimens have been taken on trees from two localities. (1) trees on bank of tidal drain Lower Pazundaung Road, (2) trees in marshy land exposed to tide near Monkey Point. *Auricula* and *Pythia* have been so far found in the same localities, but *Auricula* has never been seen on trees. *Pythia* appears to be more of a land shell than a salt water species.
- 17c. *Pythia trigona*, Troschel.—This species is also recorded from Rangoon

by von Martens. It is much rarer than *P. plicata*, only having been taken from one locality in small quantities.

- 18c. *Turbo margaritaceus*, L.—This species has been recorded from Rangoon by von Martens, but after much searching I have not been able to find a specimen.
- 19c. ? A single specimen of a Mollusc somewhat broken was found. This is probably a *Littorina* of some kind.
- 20c. *Mytilus curvatus* Dunker ? :—Some young specimens which might possibly be this were found on the training wall, but I am not able to say really what they are.
- 21c. ? Two or three apparently young bivalves were taken from the river training wall. These may perhaps belong to the genus *Modiolus*.<sup>2</sup>

---

<sup>2</sup> *Stenothyra monilifera*, Benson, should be included in the estuarine fauna of Rangoon.